

ROZWADOWSKA-DOWZENKO, Maria; STANSINSKI, Tadeusz; JAZIENIECK, Boguslaw; OLEJNICZAK, Pawel

Ballistocardiograms in hypertension. Polski tygod. lek. 13 no.26:998-1001 30 June 58.

1. (Z III Kliniki Chorob Wewnetrznych Akademii Medycznej w Poznaniu; kierownik: prof. dr med. Franciszek Labendzinski). Poznan, ul. Szkolna 8/12. III Klin. Chor. Wewn. A. M.

(HYPERTENSION, physiol.

ballistocardiography (Pol))

(BALLISTOCARDIOGRAPHY, in various dis.

hypertension (Pol))

CHODERA, Alfons; STANSINSKI, Tadeusz; JAZIENICKI, Boguslaw

Studies on the effect of chlorpromazine on experimental autonomic heart disorders in rabbits. Polskie arch. med. wewnetrz. 30 no.12: 1479-1488 '60.

1. Z III Kliniki Chorob Wewnętrznych Akademii Medycznej w Poznaniu p.o. Kierownik: doc. dr med. M. Rozwadowska-Dewzenko. Z Zakładu Farmakologii A.M. w Poznaniu Kierownik: prof. dr med. J. Dadlez.

(CHLORPROMAZINE pharmacol) (HEART pharmacol)

TUSHINSKIY, M.D., prof., STANSEAYA, V.V., MOISEYKVA, G.I., POPOV, B.N.

Material on the effect of the liver on the blood system. Trudy
IMI 2:102-108 '55 (MIRA 11:8)

1. Kafedra provedevticheskoy terapii (zav. - deystvitel'nyy chlen
AMN SSSR prof. M.D. Tushinskiy) Pervogo Leningradskogo meditsinskogo
instituta imeni akademika I.P. Pavlova.

(LIVER)

(BLOOD)

OLAKOWSKI, Tadeusz; KRZYSZKOWSKA, Anna; BASINSKA, Dobrosława; KAWCZYNSKA, Danuta; STANSKI, Wiktor.

Evaluation of BCG vaccination and its effectiveness in the Ostrołęka County. I. Evaluation of the status of BCG vaccination of children born in 1962. Przegl. epidem. 18 no.3:307-315 '64

Evaluation of BCG vaccination and its effectiveness in the Ostrołęka County. II. Tuberculin allergy in school children. Ibid.:317-324

1. Z Wojewódzkiej Stacji Sanitarno-Epidemiologicznej w Aninie (dyrektor: dr. med. J. Zasztowt); z Zakładu Epidemiologii Instytutu Gruźlicy (kierownik: doc. dr. O. Buraczewski); z Wojewódzkiej Przychodni Przeciwgruźliczej (dyrektor: dr. med. J. Meissner) oraz z Potiatowej Przychodni Przeciwgruźliczej w Ostrołęce (kierownik: lek. med. W. Stanski).

OLAKOWSKI, Tadeusz; KRZYSZKOWSKA, Anna; BASINSKA, Dobrosława; KAWCZYNSKA, Danuta; STANSKI, Wiktor.

Evaluation of BCG vaccination and its effectiveness in the Ostroleka district. III. Postvaccination allergy in school children. Przegl. epidemiol. 19 no.1:31-37 '65

1. Z Wojewódzkiej Stacji Sanitarno-Epidemiologicznej w Aninie (Dyrektor: dr. med. J. Zasztowt); z Zakładu Epidemiologii Instytutu Gruzlicy (Kierownik: doc. dr. O. Buraczewski); z Wojewódzkiej Przychodni Przeciwgruzliczej (Dyrektor: dr. med. J. Meissner) i z Powiatowej Przychodni Przeciwgruzliczej w Ostrołęce.

STANGEI', I.P., inzh.

Performance of the furnace for nonoxidizing heating of metal
in a protective atmosphere. Stal' 25 no.8:859-860 S '65.
(MIRA 18:9)

STANTSO, Vladimir Vital'iyevich, inzh.-khimik; MEL'NIKOVA, Zh.M.,
red.

[Inorganic polymers] Neorganicheskie polimery. Moskva,
Izd-vo "Znanie," 1965. 30 p. (Novoe v zhizni, nauke,
tekhnike. XI Seriya: Khimiya, no.5) (MIRA 18:5)

STANSKI, C.

"Some Legal Problems Connected with the Application of the Law of March 4, 1953, and of Other Regulations Concerning Standardization," P. 70. (WIADOMOSCI, Vol. 22, No. 2, Feb. 1954. Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955 Uncl.

STANSKI, C.

Standards as current regulations; the problem of liability for evasion of standards and the problem of enforcing standards. Pt. 2. p.266.

NORMALIZACJA (Polski Komitet Normalizacyjny) Warszawa

Vol. 23, no. 5, May 1955

So. East European Accessions List

Vol. 5, No. 1

Jan. 1956

STANSKI, C.

New regulations concerning the control of the work of standardization
and the application of standards. p. 389

NORMALIZACJA Warszawa, Poland Vol. 23, no. 7, July 1955

Monthly List of East European Accessions, (EEAI) LC, Vol. 9, no. 2,
Feb. 1959

Uncl.

STANSKI, F.

Physiology

DECEASED
C.'63

1964

SIEDLECKI, Edward; STANSKI, Wiktor; WISZNIEWSKI, Eugeniusz

Gramuloma xantomatosum; lipoidgranulomatosis, morbus
Hand-Schueller-Christian, reticuloendotheliosis cholesterolica.
Polski tygod. lek. 11 no.16:697-699 16 Apr 56.

1. Z I Kliniki Chorob Wewn. AM w Bialymstoku; kier. prof. dr.
med. Marian Tulczynski i z Zakladu Anat. Patol. AM w
Bialymstoku; kier. doc. dr. med. Ludwik Komczynski.
(LIPOIDOSIS,
Hand-Schueller-Christian dis. (Pol))

PREGOWSKI, Wladyslaw; BROKMAN, Stanislaw; STANSKI, Wiktor

On the problem of therapy of cavernous pulmonary tuberculosis. Polski tygod. lek. 14 no.44:1950-1952 2 Nov 59.

1. (Z Kliniki Gruzlicy Pluc A. M. w Bialymstoku; p.o. kierownik: dr med. Wl. Pregowski).

(TUBERCULOSIS PULMONARY, pathol.)

BROKMAN, Stanislaw; STANSKI, Wiktor

Resistance to PAS according to material of the Pulmonary Tuberculosis
Clinic of the Academy of Medicine of Bialystok. Gruzlica 29 no.9:
777-783 S '61.

1. Z Kliniki Gruzlicy Pluc w Bialymstoku Kierownik: doc. dr med.
W. Pregowski.

(PARAAMINOSALICYLIC ACID ther)

STANSKI, Wiktor

Analysis of causes of exacerbation in cases of "Minimal changes"
according to data of the City Anti-tuberculosis Clinic in
Bialystok. Gruzlica 31 no.6:680-684 Je'63.

1. Klinika Gruzlicy Pluc AM i Miejska Poradnia Przeciwigruzlicza,
Bialystok.

STANISŁAW, TARNAWSKI

CZYŻEWSKI, Kazimierz; FAŁKIEWICZ, Antoni; PACYNSKI, Adam; STANISŁAW, Tarnawski

Endemic goiter in Lower Silesia. Arch. immun. ter. dosw. 4:275-285
1956.

1. Klinika Chirurgiczna Akademii Medycznej we Wrocławiu (Kierownik: prof.
dr K. Czyżewski) II Klinika Chorob Wewnętrznych Akademii Medycznej we
Wrocławium (Kierownik: prof. dr A. Fałkiewicz) Wojewodzka Poradnia
Chorob Tarczycy we Wrocławiu (Kierownik: dr A. Pacynski)
(GOITER, statist.
nedemic goiter in Silesia)

ION, Nita, ing.; POTOCEANU, I., ing.; IORDACHE, C., ing.; STANTIEV, I.;
ANDREI, M., ing.; POPESCU, I.

Reducing cost price, an important task in the siderurgical industry.
Probleme econ 17 no.2:147-151 F '64.

1. Director tehnic conceptie, Combinatul siderurbic Hunedoara (for Ion).
2. Director general, Combinatul siderurgic Resita (for Potoceanu).
3. Director, Uzina de tevi Roman (for Iordache).
4. Director, Industria sirmei-Cimpia Turzii (for Stanatiev).
5. Seful Serviciului Planificare, uzina Ciocanul-Nadrag (for Popescu).

SHAPOVALOV, N.A., inzh.; STANISEL', I.P., inzh.

Experience in operating recuperators of open-hearth furnaces and
ways for improving their performance. Biul. TSNII GIM no. 22:20-24
'57. (MIRA 11:5)

(Open-hearth furnaces)

STANTISL'...P...man... 001... 1965.

Improving the construction of a rotary-ring furnace. Stal'
25 no.3:271-274 Mr 165. (MIRA 18.2)

STANTSEL', I.P., inzh.

Large-capacity stack furnaces for the calcination of limestone.

Stal' 22 no.12:1082-1083 D '62.

(MIRA 15:12)

1. Ukranergohermet.

(Metallurgical furnaces) (Limestone)

1. Heat pits for annealing metal in a weakly oxidizing atmosphere.
Steel' 21 no.9:857-859 S '64. (MIRA 17:10)

1. Treat "Ukrenergochermet".

STANTSEV, I. V.

Cand. Med. Sci.

Dissertation: "Ascaridosis in Surgery"

16/5/50

Central Inst. for Advancement of Physicians

SO Vecheryaya Moskva
Sum 71

STANTSO, V. (Moskva); KARPENKO, V., master; FROLOV, N., slesar';
YANKOVSKIY, Ye., inzh. (g.Odessa); KAGAN, I.; VOTYAKOV, A.,
slesar' (pos.Putintsevo, Kazakhskaya SSR); YEVDOKIMOV, A.,
tokar' (Moskva)

Suggested, created, introduced. Izobr. i rats. no.8:16-17 Ag
'61. (MIRA 14:9)

1. Zavod Amurstal', g. Khabarovsk (for Karpenko, Frolov).
 2. Nachal'nik proizvodstvennogo otdela zavoda khimicheskogo mash-
inostroyeniya, g. Penza (for Kagan).
- (Technological innovation)

Midwives

Training and specialization of midwives. Akush. i gin. no. 5, 1952.

MONTHLY LIST OF RUSSIAN ACCESSIONS, LIBRARY OF CONGRESS, DECEMBER 1952. UNCLASSIFIED.

SKORNYKOVA, L.K.; STANTSO, Ye.I.

Brief news. Vop.okh.mat. i det. 1 no.1:95-96 Ja-P '56. (MIRA 9:9)
(PUBLIC HEALTH) (ABORTION)

GRIGOR'YEVA, N.N.; STANTSO, Ye.I.

All-Union conference on the further use of psychoprophylactic
preparation of pregnant women for childbirth. Vop.okh.mat. i det.
1.no.2:88-90 Mr-Ap '56. (MLRA 9:9)

(OBSTETRICS--CONGRESSES)
(CHILDBIRTH--PSYCHOLOGY)

STANTSO, Ye.I.

The most important task of obstetricians, gynecologists, and
pediatrists is to decrease morbidity and mortality among newborns.
Vop. okh. mat. i det. 2 no.2:3-5 Mr-Ap '57 (MLRA 10:4)

1. Nachal'nik otдела lechebno-profilakticheskoy pomoshchi materiam
Ministerstva zdravookhraneniya RSFSR.
(INFANTS--MORTALITY)

STANTSO, Ye.I. (Moskva)

Efforts in lowering disease incidence among mothers and children
in the obstetrical hospitals of the Mordovian A.S.S.R. Zdrav. Ros.
Feder. 5 no.5:45-46 My '61. (MIRA 14:5)
(MORDOVIA--HOSPITALS, GYNECOLOGIC AND OBSTETRIC)

KAPLAN, A.L.; STANTSO, Ye.I. (Moskva)

Ways for the further lowering of mortality among newborn infants.
Vop. okh. mat. i det. 7 no.3:73-77 Mr '62. (MIRA 15:5)
(INFANTS (NEWBORN)—MORTALITY)

STANTSO, Ye.I.

Second Interprovincial Conference of Rural Midwives. Fel'd i
akush. 28 no.5:51-52 My'63. (MIRA 16:7)

1. Nachal'nik otdela lechebno-profilakticheskoy pomoshchi
materyam Ministerstva zdravookhraneniya RSFSR.
(MIDWIVES—CONGRESSES)

STANTSO, Ye.M.

STANTSO, Ye.M. (Moskva)

Rural obstetrics during 40 years. Vol'd. 1 akush. 22 no.7:3-6

Jl '57.

(MIRA 10:11)

(OBSTETRICS--HISTORY)

STANISO, Ye.V.

Materials of the clinical aspects of ulcerative colitis. Trudy
TSIU 78:36-40 '65. (MIRA 18:9)

1. Kafedra infektsionnykh bolezney (zav. deystvitel'nyy chlen
AMN SSSR prof. G.P. Rudnev) TSentral'nogo instituta usovershenstvo-
vaniya vrachey.

SOV/124-57-3-3571

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 3, p 136 (USSR)

AUTHORS: Stantsov, B. T., Demin, A. I.

TITLE: The Deformation of Curved Bars (Deformatsii krivyykh sterzhney)

PERIODICAL: Sb. rabot. stud. nauch. o-va. Penzensk. industr. in-ta, 1956,
Nr 2, pp 12-39

ABSTRACT: A determination of the displacements for a cantilevered ring quadrant
subjected to various types of edge loadings.

Reviewer's name not given

Card 1/1

STANTSOV, Boris Timofeyevich, inzh.-konstruktor, agit.; NOVIKOV, V.M., red.;
AZOVKIN, N.G., tekhn. red.

[From one congress to the other; a talk with B.T. Stantsov, agitator of the Riazan plant "Teplopribor"] Ot s"ezda k s"ezdu; beseda agitatora riazanskogo zavoda "Teplopribor" B.T. Stantsova. "Riazan", Riazanskoe knizhnoe izd-vo, 1961. 15 p. (MIRA 16:1)

1. Otdel glavnogo konstruktora ryazanskogo zavoda "Teplopribor" (for Stantsov).

(Riazan—Electric equipment industry)

(drawing)
STANTSYAVICHYUS, A. S., Cand Agr Sci -- (diss) "Vegetation ~~and~~ in
the Lithuanian SSR, ^{and} its significance for the agronomical characteristics
of soils and organization of weed control." Kaunas, 1958. 43 pp with
diagrams (Min of Agriculture USSR, Lithuanian Agr Acad), 130 copies (KL,
16-58, 122)

-88-

STANACH, J.

PHASE I BOOK EXPLOITATION

POL/4904

Z zagadnień techniki wojennej: Broń termojądrowa, BSP, automatyka, radiolokacja, telewizja, podczerwień, pociski rakietowe, hydroakustyka (Problems in Military Technology: Thermonuclear Weapons, Radiation Warfare (BSP), Automation, Radar, Television, Infrared, Rocket Missiles, Hydroacoustics) Warsaw, Wydawn. Ministerstwa Obrony Narodowej, 1959. 370 p. Errata slip inserted. 3,000 copies printed. (Series: Biblioteka wiedzy wojskowej. Seria II)

Scientific Ed.: Henryk Sejneński; Ed.: Michał Wróblewski; Tech. Ed.: Kazimierz Szubert.

PURPOSE: This book is intended for the general reader interested in modern weapon developments.

COVERAGE: The book contains 11 articles in which the various types of modern weapon systems are discussed. The information is based on Western sources. The basic principles of atomic reactions are given and atomic explosions are described citing as examples the Hiroshima and Nagasaki bombs. Theory concerning radiation substances and the effects of radiation on living

Card 1/4

Problems in Military (Cont.)

POL/4904

organisms are explained. Automation in artillery, aviation, and radar are described and some information on computers is included. Fundamentals of radar systems are given and basic radar equipment is described. The book also covers ground installations and equipment for aircraft guidance, ground installations for artillery fire control, installations on aircraft and naval installations. The principles of television are explained and possible uses of television in the armed forces are given. Infrared military equipment including telescopes, cameras, sights, thermopelengators, telephones, night vision apparatus, etc., are briefly described. Fundamentals of hydrolocation are given and propagation of sound waves in various media is described. The application of acoustics in the detection of fuses is pointed out. In the field of missiles the principle of their operation and a brief history of missile development are given. Mobile and stationary launchers are discussed and some information on rocket launching from aircraft and naval units is given. Remote control and self-guidance systems are briefly discussed, as are television guidance and antimissile defense. No personalities are mentioned. There are no references.

Card 2/4

Problems in Military (Cont.)

POL/4904

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Skalski, Leonard, Master of Engineering. Rocket Launchers	306
Paszkowski, Stanisław, and Kazimierz Dzieciołowski, both Masters of Engineering. Guided Missiles. General Characteristics of Guidance Systems	325

AVAILABLE: Library of Congress (UG485.22)

Card 4/4

AC/rn/fal
2-13-61

Distr: 4E3d

Explosive reactions under reduced pressure. Jerzy Stanuch. *Biul. Wojskowej Akad. Techn. im. J. Dąbrowskiego* (Warsaw) 8, No. 1(84), 123-6(1959).—A 4-group classification for about 20 explosives tested at normal pressure and at 10⁻⁴ mm. Hg (0.02-0.2 g. of powd. or pelleted material initiated with red-hot wire on a sheet) is suggested: (a) initiators detonating at either state and pressure, e.g. Pb(N₃)₂, AgN₃, Ag₂(ONC)₂, Pb 2,4,6-trinitroresorcinate; (b) initiators combusting slowly at atm. pressure, when powd., but detonating at either pressure, when pressed, e.g. cyanuric triazide, hexamethylenetriperoxidediamine; (c) blasting explosives and some initiators combusting at atm. pressure but not below 400-500 mm. Hg, e.g. diazodinitrophenol, tetrazene, and pyrotechnic comps.; and (d) Hg(ONC)₂ combusting *in vacuo* spot-wise when powd., but uniformly when pressed. A. Szafrański

3
2-BW(OW/JW)

STANUCH, Kazimierz, mgr.

Bibliography of the scientific achievements of military pharmacists
during the period between the two World Wars. Farmacja Pol 18
no.15/16:369-371 Ag '62.

*

STANISCH, Tadeusz

SURNAME, Given Names

Country: Poland

(2)

Academic Degrees: [not given]

Affiliation: Children's Surgical Ward of the Wojewodztwo Hospital
(Oddzial Chirurgii Dzieciecej, Szpital Wojewodzki), Opole; Resident
Physician (Ordynator): Dr L Czechowska

Source: Krakow, Przegląd Lekarski, Vol XVII, Ser II, No 9, 1961,
pp 337-338

Data: "A Bilateral Wilms Tumor in a Seven-Month Old Child
with Hypospadiasis and Cryptorchism."

GPO 981643

Stankin, L. A.

11 (2, 4)

PHASE I BOOK EXPLOITATION

SOV/2213

Groznyy. Nefyanoy nauchno-issledovatel'skiy institut

"Khimiya i tekhnologiya pererabotki nefti i gaza (Chemistry and Technology of Petroleum and Gas Refining Processes) Moscow, Gosstokhtekhnizdat, 1959. 278 p. (Series: Itsa: Trudy, vyp. 4) 2,500 copies printed.

Executive Ed.: T.D. Yefremov; Tech. Ed.: A.S. Polosina; Editorial Board: A.Z. Dorogochinakiy (Chairman), B.K. Amerik, G.I. Kar'man, M.M. Kamkin, V.I. Lavrent'yev, Ye.S. Lavchenko, and A.G. Nitrofanov (Deputy Chairman).

PURPOSE. This book is intended for petroleum engineers and technicians in scientific research institutes, planning organizations, and refineries.

COVERAGE: This collection of technical papers on oil and gas refining were originally discussed at the petroleum refining section of the Third Grozny Scientific-Technical Congress in 1957. The articles have been published to help further the development of the petroleum

refining industry and petrochemical industry in the Chaseni-Tagush ASSR. The Grozny refinery is outlined by A.Z. Dorogochinakiy with emphasis on the interdependence of the refinery and the aircraft, automobile and rocket manufacturing industries. Change in modern engines demand a change in fuel and lubricating oil properties. The increased use of jet aircraft makes the production of high octane aviation gasoline less important than the production of the new type of fuel, aviation kerosene, the yield of which requires a quite different refinery run. Since crude recovered at the Karabulak-Achaluki fields represent a valuable raw material for manufacturing lubricating oil and paraffin wax, their properties have been thoroughly investigated and results of analyses reviewed. The re-equipment of the fuel producing line of refineries at Grozny has been carried out on the basis of findings obtained from tests and pilot plant operations and a number of technical measures have been suggested. The authors also grade the low octane gasoline produced at Grozny. Tests were also conducted to ascertain the advisability of applying the destructive distillation of residues, which yields solar fractions badly needed for catalytic-cracking unit as feed stock. Catalytic cracking units of the K3-102 type were first put on stream in the

Groznyy refineries in 1952, and since that time continuous efforts have been made to boost their processing capacity, and improve the regeneration of catalysts. The authors make a number of suggestions as to how the throughput of the above units might be increased. The production of different types of pelleted and bead catalysts, the contamination of catalysts and their reactivation are discussed. The operation of a contact soking reactor, its design, and products yielded by contact soking units are described. The authors also deal with the manufacture of lubricating oils, paraffin and ceresine wax and indicate way of improving their properties. Electrical dehydration and denatling of crude oil and of light petroleum products are discussed. The authors state that in recent years extensive studies have been conducted on the chemical composition of petroleum products, and particularly of gases. As a result, a number of gas fractionators and compressors were built and installed to produce phenol and acetone from propylene and benzene, to synthesize ethyl alcohol and oxidize paraffinic hydrocarbons. An article is devoted to problems of automating various processes and developing the related control and gage instruments. The book contains numerous tables with the characteristics of different petroleum products obtained from refinery processing units, pilot plants and petrochemical refinery sections. Each article is accompanied by references.

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contains numerous tables with the characteristics of different petroleum products obtained from refinery processing units, plants and petrochemical refinery sections. Each article is accompanied by references.

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STANULIS, V. A.

"Some Problems in the Application of Radiometry," Utilization of Radioactive Isotopes & Emanations in the Petroleum Industry (Symposium), Min. Petroleum Industry USSR, 1957.

Results of the Joint Session of the Technical Council of Min of the Petroleum Industry USSR and Soviet Sci and Technical Association, Moscow 14-19 Mar 1956.

STANULIS, V.A.; STERLENKO, Yu.A.

Prospects for finding gas and oil in the Bajocian-Bathonian
sediments of the Kabardino-Balkar A.S.S.R. and future trends
in prospecting-drilling operations. Neftegaz. geol. i geofiz.
no.6:29-35 '64. (MIRA 17:8)

1. Groznenskiy neftyanoy institut.

STANULOV, N.

Scientific Conference on Automation in Poland. Spisane
BAN 8 no. 4: 56-58 '63.

BELCHEV, Den'o, inzh.; PETROV, Petur, inzh.; RADEV, Khristo, inzh.;
STANULOV, Nikolai, inzh.; TSANEV, Tsanko, inzh.

Automatic hopper for measuring water in molding mixtures.
Tekhnika Bulg 13 no.7:31-33 '64

STANULOV, N.

Electronic optical modulator. p. 37.
(Radio, Vol. 5, no. 12, 1956, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

STANULOV, N.

Automatic controlling. p. 33.
(Tekhnika, Vol. 6, no. 1, 1957, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

STANULOV, N.

Criotron. p. 38.

(RADIO I TELEVIZIIA, Vol. 6, no. 6, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.

STANULOV, N.

Simple system for division and multiplication of frequency. p.36.
(RADIO I TELEVIZIIA, Vol. 6, no. 7, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.

STANULOV, N.

Video telephone. p.56.

(RADIO I TELEVIZIIA, Vol. 6, no. 7, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.

STANULOV, N.

"Electronic computing machine."

p.28 (Tekhnika, Vol. 6, no. 9, 1957, Sofia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

STANULOV, N.

N. Stanulov, "Einige Analogien und Anwendungen der Informationstheorie in den Fertigungsprozessen," Nachrichtentechnik (Berlin), 7/12, December 1957, pp. 564-67.

Received on 13 May 1957.
The author is affiliated with the Institute for the Science of Communications, Sofia.

STANULOV, N.

"Electronic calculating machines."

p.32 (Tekhnika, Vol. 7, no. 2, 1958, Sofia, Bulgaria)

Monthly Index of East Europeans Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

82764

G/006/60/000/006/005/011

9.3260

AUTHOR: Stanulov, N.S., (Sofia)

TITLE: On the Transition Process in Grid-Modulated Power Generators

PERIODICAL: Nachrichtentechnik, 1960, No. 6, pp. 261 - 265

TEXT: Literature (Refs. 1, 2 and 3) describes a transition process not only in the grid circuit of a low-frequency power amplifier, but also in the grid circuit of a grid-modulated power generator. The reason is the presence of a remarkable stray inductance of the transformer, which couples the initial and power stage of a low-frequency amplifier and the modulation and generator stage of grid-modulated generators (Fig. 1). Non-linear distortions and parasitic oscillations are thereby caused in the grid circuit of the generator. The equivalent circuit of the grid-modulated generator (Fig. 2) allows the examination of the stationary and non-stationary processes in these generators. The transition function is mathematically determined. To observe the transition process on an oscillograph, the test device (Fig. 9) was constructed. The course of the grid current and the input voltage of the generator, as observed on the oscillograph screen, are shown in Figure 10. There are 10 figures and 3 references: 2 Soviet and 1

Card 1/2

82764

G/006/60/000/006/005/011

On the Transition Process in Grid-Modulated Power Generators

German.

ASSOCIATION: Scientific Research Institute for Telecommunications, Sofia,
Bulgaria ✓

SUBMITTED: January 9, 1960

Card 2/2

G/009/60/069/005/001/003
B010/B063

AUTHOR: Stanulov, Nikolai^{S.} Engineer (Sofia) ^{2LB}

TITLE: Some Problems of Medium-wave Broadcast Antennas With a Cross Section Gradually Increasing Toward the Center (Fish-bellied Antennas)

PERIODICAL: Hochfrequenztechnik und Elektroakustik, 1960, Vol. 69, No. 5, pp. 161 - 170

TEXT: The purpose of the present paper is to find the reason for the bad antifading properties of fish-bellied antennas. After introducing a sine function for the distribution of capacitance along the antenna, the author approximately calculates the basic equations of the double line for the case without damping, and therefrom he determines the distribution of current and voltage, as well as the (variable) wave impedance along the emitter, both for the half-wave antenna and its perpendicular radiation field. The results obtained may be extended to antennas having a length of $1 > \lambda/2$. Using some results known from literature, the author gives a simple method of determining the vertical radiation fields of real fish-bellied

Card 1/2

Some Problems of Medium-wave Broadcast Antennas G/009/60/069/005/001/003
With a Cross Section Gradually Increasing B010/B063
Toward the Center (Fish-bellied Antennas)

antennas by taking damping into account. This method is based on the fact that, in the presence of damping, there is a second (active) current component on the antenna, which causes an additional field which may be easily calculated. The total field consists of the additional field and the undamped radiation field. It is found that the bad antifading properties of fish-bellied antennas fed at the foot, as, e.g., concerning the position of zero angles, is primarily due to the effect of damping. Thus, the author refutes the view of some authors who assumed that the unfavorable conditions of radiation are mainly due to the varying wave impedance, or to the deviation of current distribution from the sinusoidal form. Finally, the author gives some methods of improving the antifading properties among which the change of the feeding point or the installation of additional emitters are of particular significance. There are 10 figures, 1 table, and 15 references: 2 Soviet, 3 US, and 10 German.

SUBMITTED: April 23, 1960

Card 2/2

20476

S/106/61/000/004/004/004
A055/A133

9,9000 (also 1046)

AUTHOR: Stanulov, N. S.

TITLE: A simple electronic device for statistical investigations of radio-wave propagation

PERIODICAL: Elektrosvyaz', no. 4, 1961, 28-34

TEXT: In the theory of radio-wave propagation, the ionospheric propagation plays an important part. On account of ionospheric conditions, the amplitude of the resultant field varies chaotically, in the point of reception, and fadings take place. These fluctuations of the field intensity (due to the continuously changing electron density of the ionosphere layers, to the variation of their altitude and to the interaction of waves propagating along many different ways) are represented quantitatively by a fortuitous function of time $\tilde{E}(t)$ or, rather, by one of the possible forms $E_k(t)$ ($k = 1, 2, 3 \dots$) of this constantly changing function. The maxima and minima of the recorded graphs of $E_k(t)$, as well as certain statistical parameters, are generally used in practical estimates. Two of these parameters are the time-average value \bar{E} (constant component of the process) and the so-called median

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A simple electronic device for...

value E_0 (the value of the field intensity exceeding its instantaneous values for 50% of the observation time). The function $E_k(t)$ is considered as a stationary fortuitous function (i. e. the conditions provoking the process it represents do not vary with time). Therefore,

$$\bar{E} = \int_{-\infty}^{+\infty} xp(x)dx = \lim_{T \rightarrow \infty} \frac{1}{T} \int_0^T E_k(t)dt \quad (1)$$

where \bar{E} is the average value of the stationary function $E_k(t)$, $p(x)$ is the function of the probability density of the fortuitous stationary process, and T is the duration of the observation. The determination of the average value of the field intensity can thus be reduced to the calculation of the integral of the second equation of (1). The electronic device described in the present article is based upon this method and allows to determine directly the average value of the field intensity. This electronic device (Fig. 2) consists mainly of a two-stage d-c amplifier with a relatively high input resistance, and of an electric d-c counter used as integrating apparatus. The basic diagram of the device is shown in Figure 3. Under the conditions of ionospheric propagation, the negative voltage at the output of the second detector (A) will vary from zero (minimum amplitude of the signal that reaches the

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receiver) to a certain negative value (maximum magnitude of the signal). The variations of the resultant field intensity picked up by the receiving antenna will thus manifest themselves, in the device, by proportional variations of the anode current of the second stage of the amplifier (from a certain minimum to a certain maximum value). On the other hand, the rotor of the counter (connected in series with the anode circuit of the second amplifier stage) will rotate in rhythm with the variations of the current flowing through its windings. At the end of the observation time, the number of revolutions registered by the counter will serve as a measure for the average value of the current through the counter, i.e. a measure for the average value of the field strength in the point of reception. Potentiometers P₁, P₂ and P₃ are used respectively: 1) to obtain optimum compensation; 2) to vary the amplification of the signal applied to the second tube; 3) to fix the initial working point of the second tube. The power is supplied by the 220 volt mains through a ferro-resonance stabilizer and an ordinary full-wave rectifier. The maximum anode current of the second stage being of the order of 10 to 100 ma, whereas the rated current through the counter attains usually several amperes, it is appropriate to switch off the counter shunt-resistance; the anode current of the second tube will then pass direct through the windings of the

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A simple electronic device for...

counter rotor. The electrical data of the counter being known, it is easy to establish the following equation for the current flowing through it:

$$I_{\text{count.}} = \frac{1000}{60} \frac{R_{\text{sh}}}{R_{\text{sh}} + r} \frac{k'}{U} \frac{n}{T} = \frac{n}{kT}; \quad (k = \frac{1000}{60} \frac{R_{\text{sh}}}{R_{\text{sh}} + r} \frac{k'}{U}) \quad (2)$$

where I_{count} is the rotor current, R_{sh} is the d-c shunt-resistance, r is the d-c resistance of the rotor windings, k' is the constant of the counter, U is the nominal counter voltage, n is the number of rotor revolutions, and T is the duration of the observation. If n and T are known, equation (2) allows to calculate the average value of the current I_{count} . On the other hand, the receiver to which is connected the electronic device has been calibrated, so that $E = \varphi_2(-U_{\text{inp}})$ is known (E being the field intensity in the point of reception). The average value of E (for the time that lasts the observation) can therefore be found as follows with the aid of the nomogram of Figure 8: starting from the calculated current $I_{\text{count}} = I_0$ on the ordinate-axis I_{count} , one has but to follow the arrows, and the average value (E_0) is finally found on the other ordinate-axis (axis E). To test the described electronic device, a series of observations was made, where an ordinary recording apparatus was also used. The results of these tests are grouped in a table that is repro-

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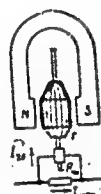
20476
S/106/61/000/004/004/004
A055/A133

A simple electronic device for...

duced at the end of the article. There are 3 figures, 1 table, 3 Soviet-bloc and 4 non-Soviet-bloc references. The reference to the English-language reference reads as follows: Gough. "The analysis of field strength records for radio link assessment." Point to point telecommunications, 1958, no. 6.

SUBMITTED: September 12, 1960

Fig. 2



Puc. 2

Figure 2:

- 1 - I_{count}
- 2 - R_{sh}
- 3 - I_{nom}

Card 5/8

STANULOV, N., inzh.; MARKOV, M., inzh.

Wireless synchronization of radio transmitters for medium-wave broadcasting. Radio i televiziia 11 no.5:140-141 '62.

~~STANULOV, N.~~ inzh.; ILIEV, Vl., inzh.; PETROV, P., inzh.

The model studies of the axially radiating antenna system for
medium-wave broadcasting. Radio i televizia 12 no.1:20-21 '63.

STANULOV, N.; NESTOROV, G.

▲ statistical conclusion in the theory of radio wave propagation.
Doklady BAN 16 no.2:141-144 '63.

1. Geophysikalisches Institut der Bulgarischen Akademie der
Wissenschaften. Vorgelegt von Akademiemitglied L. Krastanov
(Krustanov, L.).

BELCHEV, Deniu, inzh.; RADEV, Khristo, inzh.; STANULOV, Nikolai, inzh.;
TSANEV, Tsanko, inzh.

A method for the improvement of foundry production processes. Tekhnika
Bulg 11 no.7:245-246 '62.

1. Sektsiia "Avtomatika i telemekhanika" pri Bulgarskata akademiia
na naukite.

STANULOVIC, Dimitrije

~~Three cases of atypical hepatitis. Med. pregl., Novi Sad 8 no.~~
2-3:150-152 1955.

1. Interno odeljenje Glavne pokrajinske bolnice Novi Sad.
Sef: dr. Dj. Organovic.

(HEPATITIS, INFECTIOUS,
case reports. (Ser))

JAKOVLJEVIC, V.; STANULOVIC, D.

Protein loss by bile. Acta chir. iugosl. 3 no.3:251-256
1956.

1. Hirursko odeljenje i Klinicka laboratorija Gl. pokrajinske
bolnice u Novom Sadu (sefovi:prim. dr. Vl. Jakovljevic i dr.
D. Stanulovic).

(CHOLELITHIASIS, surgery,
cholecystectomy, postop. protein loss by bile (Ser))

(PROTEINS,
postcholecystectomy protein loss by bile (Ser))

(BILE,
same)

SCHWARZ, P., (Svarc) STANUJOVIC, D.

Adjusting of the colloidal gold solution for the serum gold test.
Acta med. iugosl. 10 no.1:59-62 1956.

1. Medical Research Laboratory of Vojvodina and Clinical Laboratory
of the District Main Hospital, Novi Sad.

(GOLD, in blood,

colloidal gold solution test in liver dis. (Ser))

(LIVER FUNCTION TESTS,

colloidal gold solution for serum gold test (Ser))

STANULOVIC, Dimitrije, Dr.

Functional disorders and treatment of the liver. Med. glasn.
10 no.3:110-114 March 56.

1. Interno odeljenje Glavne pokrajinske bolnice u Novom Sadu
(sef. dr. D. Ognjanovic).

(LIVER, dis.

funct. disord., ther. in hepatitis & liver cirrhosis
(Ser))

(HEPATITIS, compl.

funct. disord. of liver, ther. (Ser))

(LIVER CIRRHOSIS, compl.

same)

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Diagnostic value of colloid gold reaction in blood serum examination and its clinical use. Acta med. iugosl. 10 no.3: 399-406 1956.

1. Klinicka laboratorija Glavne pokrajinske bolnice i Pokrajinska medicinskoistraziivacka laboratorija u Novom Sadu.

(LIVER FUNCTION TESTS,
colloidal gold test (Ser))

STANULOVIC, Dimitrije

Dr. Djordje Ognjanovic; 1898-1957. Srpski arh. celok. lek. 85 no.6:
744-745 June 57.

(OBITUARIES

Ognjanovic, Djordje (Ser))

STANULOVIC, Dimitrije, dr.

Anticoagulant therapy. Med. glasn. 14 no.2:62-64 F '60.

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Upravnik: prim. dr D. Stanulovic.
(ANTICOAGULANTS ther.)

STANULOVIC, Dimitrije, prim, dr.

A case of generalized lymphosarcomatosis of the bone. Srpski arh.
celok. lek. 88 no.9:901-908 S '60.

1. Interno odeljenje Glavne pokrajinske bolnice u Novom Sadu. Sef:
prim, dr Dimitrije Stanulovic.

(LYMPHOSARCOMA case reports)
(BONE AND BONES neopl)

Stanić, Dimitrije
Stanić (L. caps); Given Names

Country: Yugoslavia

Academic Degrees: Prim Dr

Affiliation: Chief, Internal Section of the Main Provincial Hospital (Sef,
Interno Odeljenje GI Pokrajinske Bolnice), Novi Sad

Source: Belgrade, Galenika, Vol 8, No 2, June 1961, pp 42-46

Date: "The Therapy of the Most Common Ailments of the Liver"

YUGOSLAVIA

Prof Dr Dim. STANULOVIC [Affiliation not given]

"Prognostic Significance of Persistent Hyperbilirubinemia."

Belgrade, Medicinski Glasnik, Vol 17, No 2, Feb 63; p 91.

Abstract : Brief discussion and outline of differential diagnostic procedures to take in order to clarify reasons for continuous hyperbilirubinemia, with concise statements as to treatment of the relatively rare underlying diatheses usually found.

1/1

ACCESSION NR: AT4013933

S/2659/63/010/000/0093/0102

AUTHOR: Stanyukovich, A. V.

TITLE: Study of the effect of stress concentrators on the deformation capacity of heat-resistant steels

SOURCE: AN SSSR: Institut metallurgii. Issledovaniya po zharoprochnym splavam, v. 10, 1963, 93-102

TOPIC TAGS: steel, heat resistant steel, steel deformation capacity, deformation capacity, stress dependence, stress concentrator

ABSTRACT: In order to determine to what degree the presence of minor surface defects may affect the performance of a material, comparative tests were made on smooth and notched samples. The notches were created by using the diamond cone of a Rockwell instrument to make 7 small depressions on the surface of the gage length of cylindrical samples (8 mm in diameter) of E1612 austenitic steel. The conical depressions were arranged along a spiral with a 15-mm pitch. An experimental check showed that under tension the strain is distributed uniformly over the entire gage length of samples with conical depressions. Tests were conducted in a temperature range of 500-800C with a strain rate of 0.6%/hour. In all cases, failure began at the bottom of the conical depressions, but at 500C

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ACCESSION NR: AT4013933

notch in terms of plasticity or strength for several austenitic steels. The variation of this sensitivity in terms of strain capacity as a function of temperature is also analyzed and a graph is plotted to represent this relation. The author also studied the influence on the strain capacity which may be exerted by certain internal defects, both those already present within the material and those which develop during its use. Special attention, in this regard, is directed at the role of primary intercrystalline fissures. The author considers as firmly established the following points:

1) in actuality, all materials are sensitive to concentrators at high temperatures, but the specific effect of the concentrators depends to a large degree on the properties of the material and the conditions of its use; 2) sensitivity to the concentrator increases noticeably in a zone of temperatures and strain rates at which the failure is usually intergranular; 3) the effect of concentrators on the performance of materials can be established through a study of the deformation capacity of the steel under the proper conditions. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: Institut metallurgii AN SSSR (Institute of Metallurgy, AN SSSR)

3/4
Card

STANYUKOVICH, A. V.

USSR/Metals
Steel, Chromium Molybdenum
Columbium

Jan/Feb 48

"The Effect of Niobium on the Lasting Solidity of
Chromium Molybdenum Steel at 550°," Ye. S. Gintshur,
Cand Tech Sci; A. V. Stanyukovich; K. A. Lenskaya,
Inst. Gen Sci Res Turbomachinery Inst. I. I.
Polzunov, St. PP

"Kotloturbostroy" No 1

Studies effect of niobium on its resistance to
prolonged tension of a series of molybdenum-chrome
steels containing 2.7% Cr and 0.5% Mo. Gives data

1/49771

USSR/Metals (Cont'd)

Jan/Feb 48

on stability of chrome-molybdenum-niobium steels at
5000.

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STANYUKOVICH A. V.

114-11-5/10

AUTHOR: Glikman, L.A., Doctor of Technical Sciences, Stanyukovich, A.V., Candidate of Technical Sciences and Chizhik, A.I., Engineer.

TITLE: Heat-resistant Materials for Power Machinery Building. (Zharno-prochnyye materialy dlya energomashinostroyeniya)

PERIODICAL: Energomashinostroyeniye, 1957, Vol.3, No.11, pp. 22 - 26 (USSR)

ABSTRACT: The article commences with a statement of the importance of studying mechanical properties of metals at high temperatures and with a review of early work on this subject in the USSR.

After the war, work developed extensively on the study of the properties of heat-resistant materials. New laboratories for this purpose were set up in the Central Scientific Research Institute of Engineering Technology (TsNIITMASH), the Central Scientific Research Institute for Ferrous Metallurgy (TsNIICHERMET) at the Neva Works imeni Lenin (NZL), the Kharkov Turbine Works (KhTZ) and elsewhere and the laboratories at the Central Boiler Turbine Institute (TsKTI) and the Leningrad Metal Works (LMZ) were extended. In the solution of metallurgical problems involved in the manufacture of new heat-resistant materials, a leading part has been played by such enterprises as "Elektrostal", the Ural Engineering Works (Uralmashzavod), the Neva Works

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114-11-5/10

Heat-resistant Materials for Power Machinery Building.

Turbine Institute and at Leningrad University resulted in the derivation of a relationship between the quantity of metal reacting with oxygen and the time. A great deal of work was done on the ageing of high alloy steel by study of the structure and properties of a group of steels after lengthy exposure to high temperature. It was shown that, for a number of materials, identical structures can be obtained at different ageing temperatures by altering the test time. For many materials, the structural condition can be related to the impact strength. This is very useful in maintenance work. Procedures have been developed for studying the fatigue strength at high temperatures.

Recently, more attention has been paid to physical methods of investigation, such as determination of thermal conductivity and temperature coefficient of expansion.

Experimental results on creep in pipes under pressure have been compared with results of the usual tension tests and a method has been developed for calculating the equivalent stress in pipes under pressure from the results of tests on ordinary specimens that is applicable to all boiler steels (see Fig.5). The development of the first boilers and turbines for super-high steam conditions provided a great stimulus to the investigation of heat-resistant materials. Examples of heat-resistant

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114-11-5/10

Heat-resistant Materials for Power Machinery Building.

tungsten, vanadium and niobium to a total content of 1-3%. These steels are used after heat treatment. Steels of this kind are 15X11M9, 15X12BM9 and 1X12B2M9. Variants of cast-chromium heat-resistant steels are of considerable interest; materials of these kinds are steels X11176 and X1117A.

Since the war, investigational work and developments in metallurgical work on casting and forging have led to the development of a series of heat-resisting austenitic steels. One of the first of these which has been studied in the most detail is steel 3M-405 which has satisfactory technological properties and sufficiently high heat-resistance to combine with good structural stability. It has been used for the manufacture of blades and a number of other parts of turbines for super-high steam conditions and for gas turbines. During development work on the welded rotor for a gas turbine several large parts were made from this steel using different manufacturing procedures. The parts were subsequently tested at the Leningrad Metal Works and the Central Boiler Turbine Institute and it was found necessary to improve the quality of ingots and the technology of hot working. A good deal of work was done on the welding of this steel.

Steel 3M-572 has been manufactured and rolled by the "Elektro-Card5/7stal" Works and investigated in detail by the Central Boiler

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652910011-5"

Heat-resistant Materials for Power Machinery Building.

Turbine Institute. It has a high relaxation stability and low sensitivity to the presence of cuts so that it is very suitable for the manufacture of studs and bolts intended to operate at temperatures of up to 580 °C, and also for large forgings for gas turbine discs and rotors.

Steel 3M-612, a chrome-nickel austenitic steel alloyed with tungsten and titanium, has been developed. It has good mechanical properties in the temperature range 20 - 650 °C. The impact strength is maintained at a high value after prolonged ageing at 650 - 700 °C.

A great deal of work has been done on the development and use of cast austenitic steel. One such steel is brand 3A1 which has high heat-resistance and stability so that it can be used at working temperatures of up to 650 °C. Considerable difficulties had to be overcome in the manufacture of castings of heat-resistant austenitic steels because of their tendency to form films, which leads to the formation of various defects on the surface of the ingots. These defects are found in all existing austenitic heat-resistant steels. Reliable welds can be made of these steels only in regions from which such defects and porosity are completely absent. A good deal of work has been done on cast austenitic steel X25H13T-1 which has been used for

Card 6/7

Stanyukovich, A.V.

129-12-3/11

AUTHOR: Stanyukovich, A. V., Candidate of Technical Sciences.

TITLE: Investigation and development of high temperature steels.
(Issledovaniye i razrabotka zharoprochnykh staley).

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1957, No.12,
pp. 26-30 (USSR)

ABSTRACT: One of the first sections created when organising the Central Boiler-Turbine Institute imeni Polzunov (Tsentral'nyy Kotloturbinnyy Institut imeni Polzunova) was that for investigating metals. With increasing operating temperatures of the power generation equipment, research in this field had to be considerably intensified. In the prewar period, the work of this Institute could be subdivided into the following three groups: development of methods of evaluation of the high temperature resistance of materials for long duration operation; investigation of the properties of numerous Soviet produced materials at elevated temperatures; metallurgical reports on the performance of materials used in boilers and turbines. Some of the results, prewar as well as postwar, obtained in this Research Institute are very briefly reviewed, giving brief information on the numerous steels and special alloys which this Institute

Card 1/2

STANYUKOVICH, A.V.

Evaluating the plasticity of heat-resisting alloys at high
temperatures. Zav. lab. 23 no. 4:476-484 '57. (MLBA 10:6)
(Plasticity) (Heat-resistant alloys)

129-2-3/11

AUTHORS: Stanyukovich, A.V. (Cand.Tech.Sc.), Zemzin, V.K. (Cand.Tech.Sc.)

TITLE: Long Duration Strength of Weld Joints at Elevated Temperatures.
(Dlitel'naya prochnost' svarnykh soyedineniy pri vysokikh temperaturakh)

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, Nr 2,
pp.12-18 (USSR)

ABSTRACT: The aim of the investigation described in this paper was to study the operation of weld joints under conditions of static loading at elevated temperatures, paying attention mainly to long duration strength in the case of simultaneous loading of various zones of the weld joint. The investigations were carried out on pearlitic 12MΦX steel (0.13% C; 0.56% Cr; 0.27% Mo; 0.22% V), welded with pearlitic electrodes, using cutoffs of steam piping of 270 mm outer dia and a wall thickness of 32 mm and electrodes of 3 and 4 mm dia; after welding, the specimens were tempered at 740°C for 2 hours. Experiments were also carried out on the austenitic steel, 3M405 (0.09% C; 15.5% Cr; 14.4% Ni; 2.2% Mo; 1% Nb), welded with austenitic electrodes KTW5, and tempered for two hours at 740°C. In addition to the weld joints the specimens of the base material and of metal deposited from

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129-2-3/11

Long Duration Strength of Weld Joints at Elevated Temperatures.

steel 12M~~OX~~ produced by pearlitic electrodes had a strength equal to that of the base metal; the zone of the joint which is most stable against intercrystallite fracture is the thermally influenced zone. The weld joints of the austenitic steel, 3M405, produced by the austenitic electrodes KTM5, have a strength equal to that of the base metal; intercrystallite corrosion occurs primarily in the base metal. The long duration strength of various weld joints produced by austenitic electrodes on pearlitic steel is considerably higher than it is for pearlitic weld joints in the case of stresses acting in the direction of the weld axis; in this case fracture begins in the least plastic part of the joint, namely, in the austenitic weld. If the forces act transverse to the weld axis the fracture starts off near the fusion line in the zone with transient structures. In selecting electrodes for welding high temperature steel, it is necessary to consider the plastic properties of the weld under conditions of long duration stresses; for weld joints this property is decisive from the point of view of the forces acting in the direction of the weld axis. There are 3 tables, 4 figures and 3 Slavic references.

Card 3/4

STANYUKOVICH, A.V.

Investigating plasticity properties by means of testing at constant deformation rates. Issl.po zharopr.splav. 4:298-300 '59.

(MIRA 13:5)

(Nickel alloys--Testing) (Deformations (Mechanics))

SOV/32-25-6-25/53

28(5)

AUTHORS: Stanyukovich, A. V., Zemzin, V. N.

TITLE: Method of Evaluating the Durability of Welded Joints (Metody otsenki dlitel'noy prochnosti svarnykh soyedineniy)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 6, pp 715 - 721 (USSR)

ABSTRACT: Durability (D) is one of the most important criteria for evaluating welded joints for continuous duty at high temperatures. Therefore, it is of preeminent importance to devise the most rational method for the (D) determination. (D) was hitherto evaluated by testing cross welded samples (I). Service demands made on many welded structures in power engineering plants (as, for example, welded joints in steam pipings, drum rotors, etc) in which the stress is along the welding seam, do not comply with conditions in the abovementioned tests; therefore, a special method (II) of testing plane samples with longitudinal weldings (Fig 3) was devised at the Institute of the authors of the present paper (see Association)(Ref 2). The fundamental characteristics of both these methods of (D) testing((I) and (II)) are described and results obtained on typical welded

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joints are given. The fundamental rules governing the sample deformation according to (I) may be depicted by a certain scheme (Fig 4), by which it is possible to identify the least resistant component of the welded joint and the melting zone sensitivity as related to the stress concentration. Respective results are given and explained, that were obtained on weldings of weakly alloyed 12MPKh steel, 15Kh11MF chromium steel, EI415 and 15Kh1M1F perlite steels, and EI405 austenite steel (Table 1, Fig 5) as well as EI612K steel, weldings of various 12KhMF + 15Kh11MF and 12MPKh steels (with KTI-5 austenite electrodes or TSh-20 and Tsh-27 perlite electrodes) (Table 1, Fig 6) et alia. Tests (II) allow the determination of the common performance of individual zones of the welded joint; in this connection the applicability of the abovementioned deformation scheme (Fig 4), as well as the decisive role played by the plasticity of the individual welding joint components are confirmed. Respective testing results (Table 2, Fig 7) obtained on the abovementioned steel types and electrodes are given. There are 7 figures, 2 tables, and 6 Soviet references.

ASSOCIATION:

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Tsentral'nyy kotloturbinnyy institut im. Polzunova (Central Boiler Turbine Institute imeni Polzunov)

28(5)

AUTHORS:

Stanyukovich, A. V., Zaytsev, N. D.

SOV/32-25-9-30/53

TITLE:

Evaluation of the Plasticity Properties of Fireproof Steels
With Respect to Time

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 9, pp 1101-1106 (USSR)

ABSTRACT:

The test method with a constant deformation speed (DS) can be used to evaluate the plasticity properties (PP) of fireproof steels (Karskiy, Ref 2). In the case under discussion, the tensile tests were made within the temperature range 400-800° at a temperature change of 50°. Several test series were made at constant (DS), the maximum (DS) being 180 or 313%/h and the minimal (DS) $1 \cdot 10^{-1}$ to $2 \cdot 10^{-2}$ %/h. The tests at maximum (DS) were made on usual tensile-testing machines, IM-4r and IM-12, and those at minimum (DS) on the specially constructed machine 5 IM (Fig 1) which is described. The tests were performed on the last-mentioned machine on the following fireproof steels: the pearlitic chrome-molybdenum-vanadium steel EI10, the austenitic steel 1Kh18N9T and EI612, as well as some nickel alloys with various additions. The results of measurement, which are explained in detail, led to the following conclusions:

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variation in (PP) with temperature at constant (DS) is described in semilogarithmic coordinates by a V-shaped curve. Deceleration of (DS) shifts this curve to lower temperatures. A family of such V-shaped curves can show the change of minimum deformability (mD) of the steel in dependence on temperature. (mD) rises with temperature. The dependence of relative elongation on (DS) at constant temperature (up to minimum deformation) can be expressed by a step function. Having reached the level of minimum plasticity, a further deceleration of (DS) results in an increase of relative elongation. The decrease intensity of plasticity rises on destruction with a deceleration of (DS) with temperature up to a certain limit at which it falls again. At maximum test temperatures rising deformability can be observed. Temperature rise shifts the embrittlement interval to high (DS). The decrease of plasticity properties of steels at high temperatures is attributed to the development of intercrystalline

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destruction. The deformability of fireproof steels can be approximately characterized by "plasticity diagrams", which were plotted by extrapolation of the test results. There are 5 figures and 4 references, 2 of which are Soviet.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy kotloturbinnyy institut im. I. I. Polzunova (Central Scientific Research Institute for Boiler Turbines imeni I. I. Polzunov)

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AUTHOR: Stanyukovich, A. V., Candidate of Technical Sciences
TITLE: Deformability of Certain Materials for High-Temperature Service

PERIODICAL: Energomashinostroyeniye, 1960, No. 5, pp. 26-30

TEXT: The object of the present investigation was to study the effect of temperature and rate of strain on the plasticity of several engineering alloys used in the construction of power generating plant. The materials studied included: (a) Steel 3X10 (EI10), oil-quenched from 940°C and tempered for 2 h at 630°C; (b) an austenitic steel 1X18H9T (1Kh18N9T), quenched from 1050°C and tempered for 3 h at 680°C; (c) an austenitic steel 3X12 (EI612), quenched from 1150°C and tempered for 20 h at 750°C; (d) a titanium-bearing nickel/chromium alloy "A" ("A"); a similar alloy "G" ("G") with a lower titanium content, but containing a small proportion of niobium; and (e) 2 nickel/chromium alloys "B" ("B") and "B" ("V") with a high content of titanium, tungsten, and molybdenum. (All the nickel-base alloys were tested after a heat treatment designed to give them the maximum high-temperature

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Deformability of Certain Materials for High-Temperature Service
time-to-rupture) on the other, can be represented by a 3-dimension-
al diagram. Such diagrams can be used to determine the optimum
service conditions for any given material. Regarding the alloys
studied, their characteristics are illustrated in Fig. 6 where
elongation (%) of test pieces, extended to fracture at a rate of
strain of 4 to $7 \times 10^{-2}\%/h$, is plotted against the test temperature
(°C). Curves 1-8 relate to: (1) pearlitic steel EI10; (2)
steel 1X18H9T (1Kh18N9T); (3) steel 1X612 (EI612); (4) work-harden-
ed steel 1X11H9T (1Kh11N9T); (5) alloy "A"; (6) alloy "B"; (7)
alloy "V"; and (8) alloy "G". It will be seen that 550-600°C and
500-580°C are the temperature ranges in which steels 1Kh18N9T and
EI612, respectively, display minimum plasticity. The pearlitic
steel EI10 is more plastic than either of these austenitic mater-
ials. The lowest plasticity is displayed by the nickel-base alloys,
the elongation of alloy "V" in the critical temperature range (at
approximately 780°C) being less than 0.1%. In the presence of
alloying additions (tungsten, molybdenum) which slow down the
diffusion processes in these alloys, the range of minimum plasticity

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STANYUKOVICH, A.V.

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AUTHOR: Stanyukovich, A. V., Candidate of Technical Sciences

TITLE: The Effect of Work-Hardening on Deformability of Steel
1Kh18N9T

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,
1960, No. 7, pp.7-14 + 1 plate

TEXT: Following the findings of Trank, Cuff, and Grant (Ref. 1), who had reported that plasticity of austenitic steels at high temperatures is considerably lowered by preliminary deformation, the present author studied the effect of work-hardening on the high-temperature ductility of a steel, containing 0.12% C, 1.0% Mn, 16.98% Cr, 10.96% Ni, 0.01% S, 0.018% P, 0.66% Si, and 0.5% Ti. The experimental work was carried out on tensile test pieces (8 mm diameter, 40 mm gauge length) both in the heat-treated condition (quenched from 1050°C and tempered for 3 h at 680°C) and after the same heat treatment, followed by 18 and 34% cold deformation (in tension), the former degree of deformation having been chosen as that encountered in practice in bending tubes for steam power plant. Both elongation, δ , and reduction of area, ψ , were measured in

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of various depth and nature (inter- and intra-crystalline) were formed on the test pieces. Correlation of the results of mechanical tests and metallographic examination indicated that although the surface cracks were formed already at high rates of strain, their effect on the ductility of steel became apparent only when inter-crystalline fissures were formed in the interior of the test pieces, under which conditions the surface cracks changed into coarse, inter-crystalline cracks, causing the ultimate fracture of the test pieces. By extrapolating empirical curves (δ versus rate of strain) it was shown that in the case of the heat-treated material, δ is never lower than 1%, whereas the heat-treated material subjected to 18% preliminary deformation, can be expected to fail with δ attaining value as low as 0.3%. The variation of δ with rising temperature is attributed by the present author to the transition from one mode of plastic deformation to another. It is postulated that minimum ductility of the investigated steel is attained at a certain critical temperature, below which deformation by slip

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The Effect of Work-Hardening on Deformability of Steel 1Kh18N9T predominates, the diffusion creep playing the predominant part above this temperature. This critical temperature becomes higher with increasing rate of strain and decreasing degree of preliminary deformation. There are 8 figures, 1 table and 3 references: 2 Soviet and 1 English.

ASSOCIATION: TsKTI imeni I. I. Polzunova (TsKTI, imeni I. I. Polzunov)

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